a) an elongated catheter shaft having proximal and distal ends, a port in the distal end, and an inner lumen extending at least within a distal portion of the catheter shaft to the port in the distal end; and



b) a distal extremity of the catheter shaft having a tubular portion with an expanded section of cylindrical shape having an outer diameter greater than an outer diameter of a tubular portion proximal to the expanded section.